



What is claimed is

1. A method of preparing a cosmetic end formulation using a nanodispersion, which comprises
 - (a) a membrane-forming molecule,
 - (b) a coemulsifier and
 - (c) a lipophilic component,by
 - (α) mixing the components (a), (b) and (c) until a homogeneous clear liquid is obtained (so-called nanodispersion prephase), and
 - (β) adding the liquid obtained in step (α) to the water phase of the cosmetic end formulations, steps (α) and (β) being carried out without any additional supply of energy.
2. Method according to claim 1, which is characterised in that step (α) is carried out in anhydrous medium.
3. Method according to claim 1, which is characterised in that step (β) is carried out without homogenisation.
4. Method according to claim 1, which is characterised in that the particles in the nanodispersion have an average diameter of <50 nm.
5. Method according to claim 1, which is characterised in that the nanodispersion comprises,
 - (a) as membrane-forming molecules, substances which are suitable for forming so-called bilayers,
 - (b) as coemulsifiers, substances which preferably form O/W structures and,
 - (c) as lipophilic component, a functional lipophilic active agent customarily used in cosmetics.
6. Method according to claim 1, which is characterised in that the nanodispersion comprises as component
 - (a) a phospholipid, a hydrated or partially hydrated phospholipid, a lysophospholipid, a ceramide or mixtures thereof.

7. Method according to claim 6, which is characterised in that component (a) is present in the nanodispersion in a concentration of 0.1 to 30 % by weight, based on the total weight of the components (a), (b) and (c).

8. Method according to claim 1, which is characterised in that the nanodispersion comprises as component

(b) an emulsifier of the polyoxyethylene type, saturated and unsaturated C₈-C₁₈alkylsulfates, the alkali metal, ammonium or amine salts of C₈-C₂₀fatty acids, C₈-C₂₀alkanesulfonates, fatty alcohol phosphorates, the salts of colic acid, invert soaps (quats); partial fatty acid esters of sorbitan, sugar esters of fatty acids, fatty acid partial glycerides, alkyl maltoside, alkylglucosides, C₈-C₁₆betaines, C₈-C₁₈sulfobetaines or C₈-C₂₄alkylamido-C₁-C₄-alkylenebetaines, proteins, polyglycerol esters of fatty acids, propylene glycol esters of fatty acids, lactates of fatty acids or a mixture of these substances.

9. Method according to claim 8, which is characterised in that the nanodispersion comprises as component

(b) at least one emulsifier of the polyoxyethylene type.

10. Method according to claim 1, which is characterised in that the nanodispersion comprises as component

(b) an emulsifier of the polyoxyethylene type or a mixture of these substances.

11. Method according to claim 10, which is characterised in that component (b) in the nanodispersion is

polyethoxylated sorbitan fatty acid esters, polyethoxylated fatty alcohols, polyethoxylated fatty acids, polyethoxylated vitamin E derivatives, polyethoxylated lanolin and the derivatives thereof, polyethoxylated fatty acid partial glycerides, polyethoxylated alkylphenols, sulfuric acid semiesters, polyethoxylated fatty alcohols and the salts thereof, polyethoxylated fatty amines and fatty acid amides, polyethoxylated carbohydrates, block polymers of ethylene oxide and propylene oxide.

12. Method according to claim 1, which is characterised in that component (b) in the nanodispersion used according to this invention is present in a concentration of 1 to 50 % by weight, based on the total weight of the components (a), (b) and (c).

13. Method according to claim 1, which is characterised in that the nanodispersion comprises as component

(c) a natural or synthetic or partially synthetic di- or triglyceride, a mineral oil, silicone oil, wax, fatty alcohol, guerbet alcohol or the ester thereof, a lipophilic functional cosmetic active agent, including sunscreens, or a mixture of these substances.

14. Method according to claim 13, which is characterised in that the nanodispersion comprises as component

(c) a sunscreen or a fat-soluble vitamin.

15. Method according to claim 1, which is characterised in that component (c) is present in the cosmetic end formulation in a concentration of 0.1 to 80 % by weight.

16. Method according to claim 1, which is characterised in that the nanodispersion comprises as component

(d) a C₂-C₈alcohol.

17. Method according to claim 1, which is characterised in that the nanodispersion is present in the end formulation in a concentration of 0.01 to 99 % by weight.

18. Method according to claim 1, which is characterised in that at least one component (a), (b) or (c) is an ingredient used in cosmetics for treating or protecting the skin, mucosae and hair.

19. A cosmetic end formulation in the form of a gel, which comprises a nanodispersion as defined in claim 1.

20. A cosmetic end formulation in the form of a cream, lotion or milk, which comprises a nanodispersion as defined in claim 1.

21. A cosmetic end formulation in the form of a stick, which comprises a nanodispersion as defined in claim 1.
22. A cosmetic end formulation in the form of a spray or aerosol, which comprises a nanodispersion as defined in claim 1.
23. A cosmetic end formulation in the form of a foam, which comprises a nanodispersion as defined in claim 1.
24. A cosmetic end formulation in the form of a paste, which comprises a nanodispersion as defined in claim 1.
25. A cosmetic end formulation according to claim 19, wherein the nanodispersion is present in the aqueous phase.
26. A cosmetic end formulation according to claim 19, wherein the aqueous phase comprises the nanodispersion in a concentration of 0.01 to 20 % by weight.
27. A cosmetic end formulation in the form of a powder, lacquer, pellet or make-up, which comprises a nanodispersion as defined in claim 1, the nanodispersion being present in dehydrated form.
28. A nanodispersion prephase, which is obtained by mixing the components
 - (a) membrane-forming molecule,
 - (b) coemulsifier,
 - (c) lipophilic component and, optionally,
 - (d) a C₂-C₈alcohol until a homogeneous clear liquid is obtained, mixing being carried out in anhydrous medium.
29. A nanodispersion prephase according to claim 28, which is characterised in that mixing is carried out without any additional supply of energy. -
30. A cosmetic end formulation in the form of an oil or lacquer, which comprises a nanodispersion prephase as defined in claim 28.
31. A nanodispersion, which comprises
 - (a) a membrane-forming molecule,
 - (b) a coemulsifier and
 - (c) a lipophilic component,which is obtained by
 - (α) mixing the components (a), (b) and (c) until a homogeneous clear liquid is obtained, and

(β) adding the liquid obtained in step (α) to the water phase, steps (α) and (β) being carried out without any additional supply of energy.